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A New Genus of Rosensteiniidae (Acarina) from Mexico

BURRUSS McDANIEL, JR.

DEPARTMENT OF BIOLOGY
TEXAS COLLEGE OF ARTS AND INDUSTRIES

AND

EDWARD W. BAKER

ENTOMOLOGY RESEARCH DIVISION, AGRICULTURAL RESEARCH SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

The material upon which this new genus is based was obtained from the Mexican free-tailed bat, *Tadarida mexicana*, collected by D. C. Carter, Department of Wildlife Management, Agricultural and Mechanical College of Texas. The apparent association of this mite with its host is not thoroughly understood. The female genitalia are typical of those of the free-living acaroids in that they are pointed anteriorly and are free of wrinkles or striation, but the dorsal setation and striation and the size of legs I and II are similar to those of certain parasitic psoroptoids.

The family Rosensteiniidae Cooreman, 1954, should be considered as a distinct family and not as a possible synonym of the family Canestriniidae (Baker, *et al.*, 1958).

Mydopholeus, new genus

Legs with well-developed empodial claws; tarsus I with three slender solenidia (*w*), and II with one solenidion, and each with a strong spine-like seta (*ba*) (on tarsus I of the male this seta is greatly reduced); dorsum of body striated, with fifteen pairs of setae; body not divided into propodosomal and hysterosomal regions by suture; apodemes of legs I and II fused, apodemes I forming a Y, and apodemes II a W; without eyes; females with dorsal bursa copulatrix; males and females with genital discs; males without anal discs; venter of rostrum of both sexes with flat well-developed lobe; chelicera with a medial or paraxial seta, and a lateral or antiaxial seta.

Type of genus.—Mydopholeus capillus, new species.

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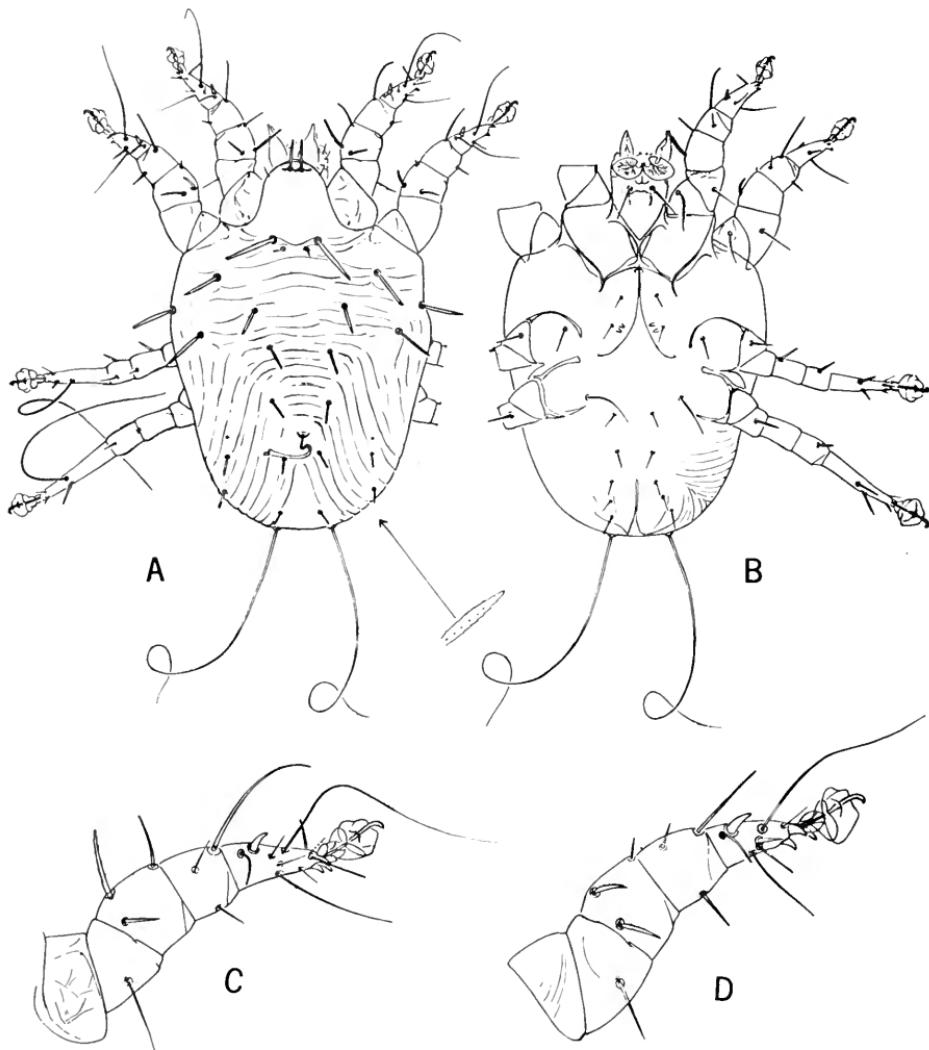


FIG. 22. *Mydopholeus capillus*, female: A, dorsum, with detail of seta; B, venter; C, leg I; D, leg II.

Mydopholeus capillus, new species. Figures 22 and 23.

Female: Body flat, broadly ovate anteriorly, narrowing posteriorly, without suture separating propodosoma and hysterosoma. Propodosomal region anterior to external scapular setae (*sc e*) and internal scapular setae (*sc i*) smooth and without striation pattern characteristic of dorsum. With a pair of internal vertical setae (*vi*) and a pair of smaller external vertical setae (*ve*); the internal vertical pair the same shape as those on the rest of the dorsum, the external

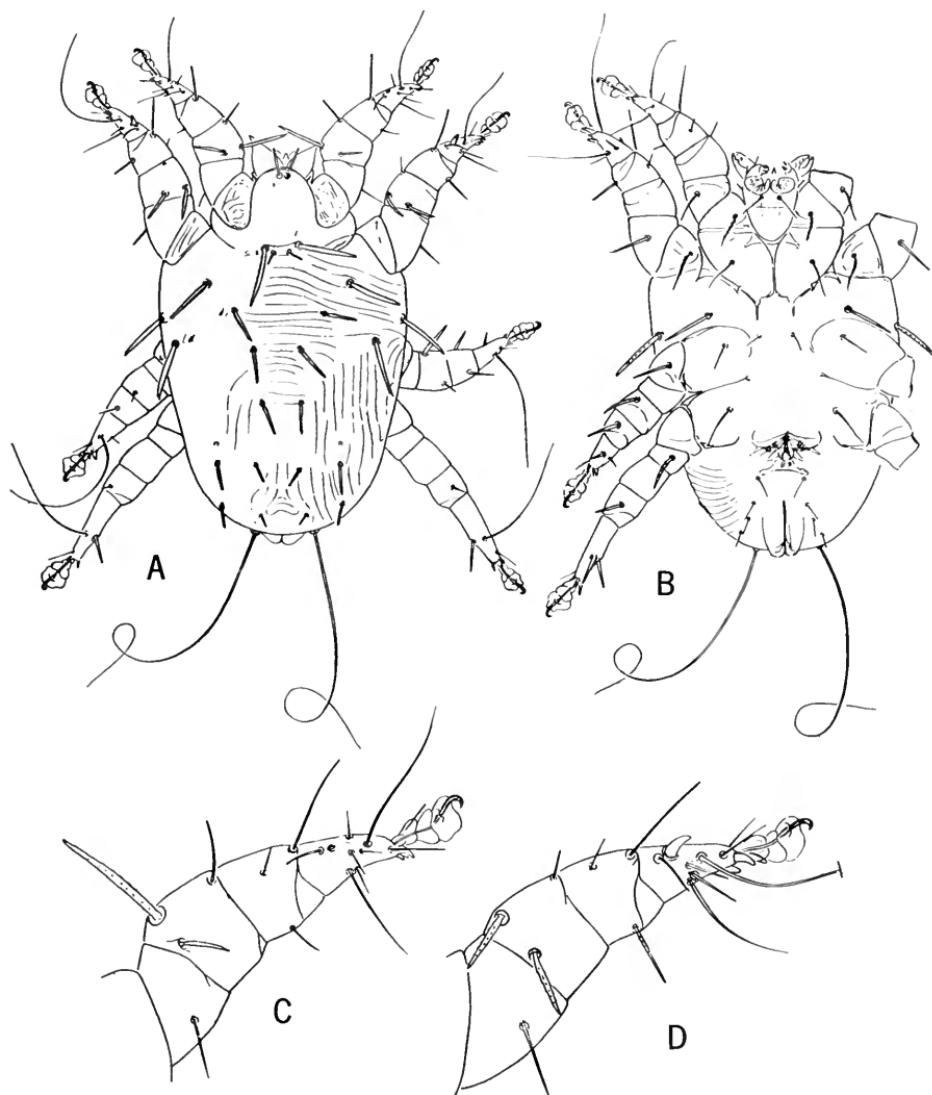


FIG. 23. *Mydopholeus capillus*, male: A, dorsum; B, venter; C, leg I; D, leg II.

vertical pair small and hair-like. Idiosoma with fifteen pairs of setae. The external scapular setae (*sc e*) large and many times as long as the tiny internal scapulars (*sc i*). The humeral setae (*hi*, *he*) and anterior laterals (*la*) of the same shape as the external scapulars but smaller, the dorsal setae (*d1*, *d2*, *d3*, and *d4*) smaller than the other idiosomal setae and decreasing in size from *d1* to *d4*. The posterior laterals (*l2*, *l3*) not half as large as the anterior laterals. The external sacrals (*sa e*) small and similar in shape but smaller than the posterior laterals; internal sacrals (*sa i*) long and whip-like. All dorsal setae pectinate. Dorsal

striation pattern prominent and diagnostic. Bursa copulatrix located between dorsal setae d_3 and d_4 . Chelicerae large and scissors-shaped, with medial or paraxial seta and lateral or antiaxial seta. Two veined, flat lobes on venter of rostrum. Palpal tarsus with one solenidion. Venter of body with ten pairs of setae (excluding those on coxae); a pair on rostrum just behind lobes, two pairs just laterad of genital opening, one pair within the apodemes of legs III and IV; two pairs of preanal and three pairs of anal setae, all hair-like in appearance. Apodemes of legs I and II fused with the endogynium; those on leg I forming a Y and those on leg II forming a W. Genital discs minute; genitalia triangular and sharply pointed anteriorly. Striation pattern of dorsum extending to venter of opisthosomal region of body. Anus a long slit with ill-defined lobes at posterior end; bounded by three pairs of anal setae. Legs I and II short and stout, larger than III and IV, all with five segments. All legs bearing caruncles distinctly connected to tarsus by stalk. Empodial claws large. Famulus missing. Three characteristic solenidia (w) on tarsus I, and a single solenidion on II; the solenidial taxy is as follows: tarsi I-IV: 3-1-0-0; tibiae I-IV: 1-1-1-1; genua I-IV: 1-1-10; ba present, short, strong and spine-like. Legs III and IV slender, with the tarsus approximately as long as all other segments combined, and with a long dorsal whip-like seta. Length 402 μ ; width 261 μ .

Male: Similar to female but smaller; with same setal pattern. Anal lobes extending beyond margin of body and visible from above. Rostrum with ventral lobes as in female. Legs I and II larger than III and IV; leg III short and composed of segments nearly equal in length; leg IV longer than other legs, with tarsus approximately as long as other segments combined. Ba on leg I minute and inserted in a depression; well developed on leg II. All legs bearing caruncles as in female. Apodemes of legs I and II fused as in female. Venter of body with ten pairs of setae arranged as follows: a pair located next to the ventral lobes of the rostrum; a pair within the W formed by the apodemes of legs I and II; two pairs of large setae similar in structure to those on dorsum located between legs II and III near body margin; a pair of small setae situated at the posterior fusion of apodemes of legs I and II; one pair each within apodemes of legs III and IV; one pair of genital setae at the posterior base of the genitalia; and three pairs of anal setae. The male genitalia lie between apodemes of leg IV. There are no anal discs. Length 389 μ ; width 229 μ .

This species is described from the female holotype, the male allotype, two male and three female paratypes collected from *Tadarida mexicana*, sixteen miles northeast of Tamazula, Jalisco, Mexico, January 19, 1960, by D. C. Carter. The holotype and allotype are deposited in Chicago Natural History Museum. The paratypes are in the United States National Museum.

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